1801



TECHNICAL SPECIFICATIONS

by C-COM Satellite Systems Inc.

The iNetVu® 1801 Drive-Away Antenna is a 1.8m auto-acquire satellite antenna system which can be mounted on the roof of a vehicle for Broadband Internet Access over any configured satellite. The system works seamlessly with the iNetVu® 7710 Controller providing fast satellite acquisition within minutes, anytime anywhere.



Features

- One-Piece precision offset, thermoset-molded reflector with back cover
- Optional 2pcs and 4pcs reflector available
- Heavy duty feed arm capable of supporting up to 11kg (25 lbs) RF Electronics (LNB & BUC)
- Designed to work with the iNetVu® 7710 controller
- Works seamlessly with the world's most popular commercially available satellite modems
- 3 Axis motorization
- Supports manual control and hand crank when required
- One button, auto-pointing controller acquires any Ku or C band satellite within 2 minutes
- Locates satellites using the most advanced satellite acquisition methods
- Supports Skyware Global 1.8m antenna Type 183
- Standard 2 year warranty



Application Versatility

Whether you operate in Ku or C band, the 1801 system is easily configured to provide instant access to satellite communications for any application that requires reliable and/or remote connectivity in a rugged environment. Ideally suited for industries such as Oil & Gas Exploration, Military Communications, Disaster Management, SNG, Emergency Communications Backup, Cellular Backhaul and many others.





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ciNetVu®

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Reflector
Platform Geometry
Deployment Sensors GPS Antenna
1.8m prime focus, offset feed, SMC (1)
Elevation over Azimuth
Compass ± 2°, Tilt Sensor ± 0.2°

F/D Ratio 0.6

Azimuth Full 360° in overlapping, 200° sectors

Elevation 0° to 90° Polarization ± 95°

Elevation Deploy Speed Variable 2º /sec typ.

Azimuth Deploy Speed Variable 15°/sec typ., 10°/sec typ.

Peaking Speed 0.1°/sec

Motor Voltage 24VDC 15 Amp (Max.)

Environmental

Wind loading
Operational
72 km/h (45 mph)

 Survival

 Deployed
 112 km/h (70 mph)

 Stowed
 225 km/h (140 mph)

Temperature Operational

Operational -30° to 55° C (-22° to 131° F) Survival -40° to 65° C (-40° to 149° F)

Thermal Test per MIL-STD-810F, Method 501.4, High/Low Temperatures Vibration Test per MIL-STD-810F, Annex A, Category 4, Truck/Trailer/Tracked Shock Test per IEC 60068-2-27

Electrical

Rx & Tx Cables 2 RG6 Cables Control Cables

Standard 10 m (33 ft) Extension Cable Optional Up to 45 m (150 ft) available

RF Interface

Radio Mounting Feed arm/ Inside vehicle
Coaxial RG6U from feedhorn to base plate

Axis Transition Twist-Flex Waveguide

Electrical Interface 9.1m (30 ft) ext. cables w/MIL connectors

VSWR Tx 1.3:1

Physical

Mounting Plate L: 132 cm (52") W: 71 cm (28") Stowed Dimensions L: 250 cm (98") W: 188 cm (74") H: 67 cm (26.4")

Deployed Height 248 cm (97.6")
Total Weight (w reflector) 173 kg (380 lbs)
Reflector Weight 37 kg (81 lbs)
Platform Weight 136 kg (299 lbs)

Optional Cases:

1 case (2pcs reflector): 207cm x 102.9 cm x 50.8 cm (81.5" x 40.5" x 20") Total weight w/reflector: 104.8 kg (231lbs)

2 cases (4pcs reflector): 104.1cm x 99.1cm x 34.3cm (41" x 39" x 13.5")

Total weight w/reflector: 90.7 kg (200 lbs)

Ku-Band (Linear Orthogonal)		Receive		Iransmit
Transmit Power		(1 to 200 v	watt ⁽²⁾)	
Frequency (GHz)		10.70-12.7	75 ⁽³⁾	13.75-14.50
Feed Interface		WR75		WR75
Efficiency		70%		70%
Midband Gain (± 0.2dBi)		45.30		46.80
Antenna Noise Temp. (K)		10° EL= 43	3 / 20° EL=	28 / 30° EL=23
Sidelobe Envelope,	1°<Θ<20°		29-25 Log	jΘ
Co-Pol (dBi)	20°<Θ<26	5.3°	-3.5	
	26.3°<Θ<	48°	32-25 Log	jΘ
	48°<Θ<18	30°	-10 (Avera	ge)
Cross-Polarization on Axis Within 0.5 dB Beamwidth		-30 dB -26 dB		
Isolation (Port to Port)		35 dB		80 dB

C-Band (Linear)		Receive		Transmit
Standard Frequency (GHz) Feed Interface		3.40-4.20 ⁽³⁾ WR229		5.850-6.725 WR137 or Type N
Midband Gain (± 0.30	dBi)	35.40		39.30
Antenna Noise Temp	. (K)	10° EL= 4	1 / 20º EL=	= 36 / 30° EL=33
Sidelobe Envelope,	2.5°<Θ<2	0	29-25 Log	Θ
Co-Pol (dBi)	20°<Θ<26	5.3°	-3.5	
	26.3°<Θ<	48°	32-25 Log	Θ
	48°<Θ<18	30°	10 (Avera	ge)
Cross-Pol: on Axis		-30 dB		
Within 0.5 dB Beamwidth		-26 dB		
Tx/Rx Isolation		60 dB		60 dB

C-Band (Circular)	Recei	ive	Transmit	
Standard Frequency Feed Interface Midband Gain (± 0.4	WR dBi) 35.		5.85-6.425 WR137 or Type N 39.50	
Antenna Noise Temp. (K) 10° EL= 41 / 20° EL= 36 / 30° EL= 33				
Sidelobe Envelope,	2.8°<Θ<20°	29-	-25 Log Θ	
Co-Pol (dBi)	20°<Θ<26.3°	-3.5	5	
	26.3°<Θ<48°	32-	·25 Log Θ	
	48°<Θ<180°	-10	(Average)	
Isolation	60	dB	60 dB	

Shipping Weights & Dimensions*

Crate: 213 cm x 89 cm x 84 cm (84" x 35" x 33"), 55 kg (121 lbs)
Platform: TBD; 7710 Controller: 4.5kg (9.9 lbs.); Cables: 5 kg (11 lbs)
Reflector Box (Reflector, Back Cover included) on Pallet, wood:
208 cm x 206 cm x 38 cm (82" x 81" x 15"), 102 kg (225 lbs)

*The shipping weights/dims can vary for particular shipments depending on actual system configuration, quantity, packaging materials and special requirements

Notes: (1) Antenna based on Skyware Global, Type 183

 $\ensuremath{^{(2)}}$ Depending on size and weight for feed arm mounting limitation

(3) LNB PLL Type required with stability better than ± 25 KHz



